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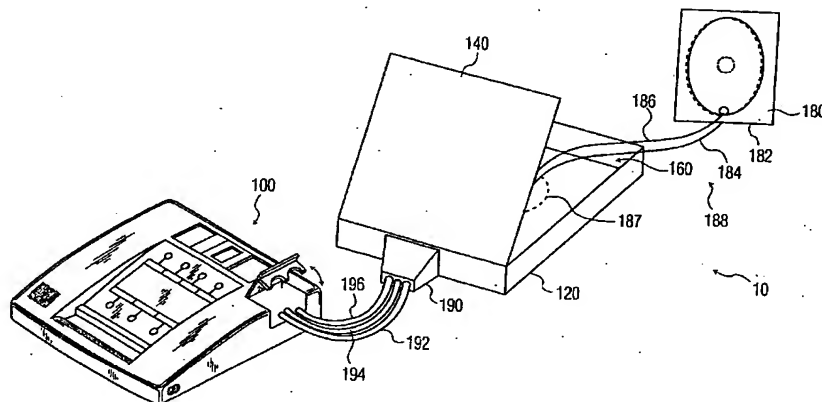
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(54) Title: ELECTRIC- OR MAGNETIC-FIELD BASED DETECTION OF WHEN ELECTRODE PADS HAVE BEEN HAN-  
DLED OR REMOVED FROM THEIR PACKAGE



(57) Abstract: Handling or removal of a pair of defibrillator electrode pads from their package is detected in order to effectively time the issuance of prompts to guide the user. One plate of a capacitor is embedded in the package, the electrode pads and lead wires serving as the other plate. Impedance across the capacitor in an alternating current circuit is monitored to detect an increase in the distance between the pads and the package. The impedance level is determined, in a low-cost hardware solution, by rectifying and then integrating an output voltage of the capacitor to produce a voltage signal whose magnitude attenuates as the pads are handled or removed. In one embodiment, the above methodology is time-division multiplexed with an alternative process that identifies handling or removal based on pad-to-pad impedance. In a further embodiment, the capacitive configuration is replaced with an inductive one.

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